

Who has seen the WIMP? Neither you nor I.
(A LUX talk)
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The LUX (Large Underground Xenon) experiment is designed for the direct detection of dark matter particles via their collisions with xenon nuclei. This two-phase xenon time-projection chamber is being operated deep underground on the 4850 foot level of the Sanford Underground Research Facility in Lead, South Dakota. Results will be presented from the first dark matter search data set, as well from several novel detector calibrations using tritium, radioactive krypton, and monoenergetic neutrons from a deuterium-deuterium neutron generator. The LUX results are inconsistent with the low-mass WIMP signal interpretations of data from several recent direct detection experiments. This talk will provide an overview of the LUX experiment focusing on the most recent science results, and will also describe the upcoming LUX-ZEPLIN experiment.

